Stanford

# Rathinaraja Jeyaraj

Postdoctoral Scholar, Pathology

Curriculum Vitae available Online  Resume available Online

## Bio

### BIO

I work at the intersection of AI, multimodal learning, and large-scale image analytics, with a strong focus on computational pathology and foundation models for healthcare. My current research interests include LLMs, VLMs, multimodal reasoning, whole-slide image analysis, retrieval-augmented generation (RAG), and trustworthy AI for medical decision support.

I develop scalable deep learning systems spanning WSI preprocessing, multiple instance learning, segmentation, survival prediction, and multimodal image-text modeling. My work also involves attention interpretability, contrastive learning, pathology foundation model adaptation, and large-scale AI pipelines. Beyond healthcare AI, I have experience in time-series forecasting, distributed computing, cloud infrastructure, and real-time computer vision systems for industrial and smart-city applications.

I am particularly interested in building reliable, interpretable, and clinically meaningful AI systems that bridge computer vision, multimodal learning, and large-scale reasoning.

### STANFORD ADVISORS

- Jeanne Shen, Postdoctoral Faculty Sponsor

### LINKS

- Personal website: https://rathinaraja.github.io/

## Publications

### PUBLICATIONS

- **STARC-9: A Large-scale Dataset for Multi-Class Tissue Classification for CRC Histopathology.** *ArXiv*
  Subramanian, B., Jeyaraj, R., Peterson, M. N., Guo, T., Shah, N., Langlotz, C., Ng, A. Y., Shen, J.
  2025